ARTICLE XV

FLOODPLAIN ZONING

Section 15.01

<u>Purpose</u> - The purposes of this Bylaw are to: protect human life and health and minimize danger to emergency response officials in the event of flooding; minimize expenditure of public money for flood control projects and emergency response and clean up; reduce damage to public and private property and utilities resulting from flooding waters and debris; and ensure that the Town of Marshfield qualifies for participation in the National Flood Insurance Program.

Section 15.02

Applicability - This Bylaw applies as an overlay district to all Areas of Special Flood Hazard located within the jurisdiction of the Town of Marshfield and designated as Zone A, AE, AH, AO, or VE on the Plymouth County Flood Insurance Rate Map (FIRM) issued by the Federal Emergency Management Agency. The map panels of the Plymouth County FIRM that are wholly or partially within the Town of Marshfield are panel numbers 25023C0116J, 25023C0117J, 25023C0118J, 25023C0119J, 25023C0136J, 25023C0137J, 25023C0138J, 25023C0139J, 25023C0143J, 25023C0207J, 25023C0226J, 25023C0227J, 25023C0228J, 25023C0229J, 25023C0231J, 25023C0232J, 25023C0233J, 25023C0234J, 25023C0237J, and 25023C0241J, dated July 17, 2012. This area shall be known as the Floodplain District. The exact boundaries of the District may be defined by the base flood elevations shown on the FIRM and further defined by the FEMA Plymouth County Flood Insurance Study (FIS) booklet dated July 17, 2012. The FIRM and FIS booklet are incorporated herein by reference. In the event any provisions of this bylaw are in conflict with requirements for any other districts, the more restrictive regulation shall take precedence.

Section 15.03

<u>Floodplain Permits</u> - Permits for development and uses of land within the Floodplain District shall be required for the following. Such applications shall be obtained prior to or in conjunction with building permits if necessary:

- 1. new construction of residential and non-residential structures;
- 2. substantial improvement (as defined) of any existing structure;
- 3. expansion of the footprint of any existing structure;
- 4. alteration of topography (as defined).

Section 15.04

<u>Contents of Applications</u> - Applications for floodplain permits shall be made to the Building Inspector except where indicated below. Applications shall contain:

- 1. elevation in relation to mean sea level of the lowest floor (including basements or cellars) of all existing and proposed structures;
- 2. elevation in relation to mean sea level of existing and proposed floodproofing;
- 3. signed statement by a registered professional engineer or architect that the requirements of this bylaw have been met; (NOTE: The above-referenced requirements may be met through submission of a FEMA Elevation Certificate.)
- 4. plans for any breakaway walls to be used to enclose space below the base flood elevation (in V zones);
- 5. description of topographic alterations including existing and proposed grades and a delineation of the Special Flood Hazard Area boundary line;
- 6. site plan certified by a registered land surveyor showing all existing and proposed natural and constructed features on the property. The site plan shall include a notation of the Special Flood Hazard Area designation for all existing and proposed structures.
- 7. base flood elevation data is required for subdivision proposals or other developments greater than 50 lots or 5 acres, whichever is the lesser, within Zone A, where such data is not provided on the FIRM.

Section Standards - Areas of Special Flood Hazard - All permits granted under Section 3 above shall be subject to the following provisions:

- All development and redevelopment, whether permitted by right or by special permit, shall be in accordance with the standards of the Massachusetts State Building Code, the Wetlands Protection Act (Chapter 131, Section 40) and regulations (310 CMR 10.00, 310 CMR 13.00, and 310 CMR 12.00), septic system regulations (310 CMR 15, Title 5), and all other applicable federal, state and local requirements. Any variance from the provisions and requirements of the above referenced state regulations may only be granted in accordance with the required variance procedures of these state regulations.
- 2. The lowest floor (including basement or cellar) of any new or substantially improved residential structure shall be elevated to or above the base flood elevation level. In determining the base flood elevation, consideration shall

be given to the actual field conditions where they indicate a flood elevation higher than that shown on the FIRM maps. Applicants for such structures are strongly encouraged to design structures to elevate them an additional foot above the base flood elevation level to account for mapping variations, greater than 100 year storms and relative sea level rise.

- 3. In any new residential structure, there shall be no basement or construction below the base flood elevation and upon substantial improvement or expansion of any existing residential structure, no new basement shall be installed below the base flood elevation.
- 4. The lowest floor (including basement or cellar) of any new and substantially improved nonresidential structure shall be elevated to or above the base flood elevation level or be floodproofed (as defined in the Massachusetts State Building Code) to this level.
- 5. All utilities shall be located and constructed at or above base flood elevation to reduce or eliminate flood damage.
- 6. No alteration of topography shall be permitted where it may result in increased runoff or drainage to the detriment of other property owners or the town.
- 7. Certification by a registered professional engineer or architect for all floodproofing measures shall be required.
- 8. Storage of fuel oil, toxic or hazardous materials below the base flood elevation shall be floodproofed.
- 9. Within Zones AH and AO, adequate drainage paths must be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

Section Additional Requirements in Velocity (V) Zones - If proposed construction or alteration of topography is located within a V Zone on the FIRM maps, all floodplain permits granted under Section 3 above shall be subject to the following additional requirements:

- 1. All new construction within V Zones shall be located landward of the reach of mean high tide.
- 2. All new construction and substantial improvements within the V Zones shall be elevated on adequately anchored pilings or columns and securely anchored to such piles or columns so that the lowest portion of the structural members of the lowest floor (excluding the pilings or columns)

is elevated to or above the base flood level. In determining the base flood elevation, consideration shall be given to the actual field conditions where they indicate a flood elevation higher than that shown on the FIRM maps. A registered professional or architect shall certify that the structure is securely—anchored to adequately anchored pilings or columns in order to withstand velocity waters and storm overwash. Applicants for new or substantially improved structures are strongly encouraged to design structures to elevate them an additional foot above the base flood elevation level to account for mapping variations, greater than 100 year storms and relative sea level rise.

- 3. All new construction and substantial improvement within V Zones shall have the space below the lowest floor free of obstructions or be constructed with breakaway walls intended to collapse under stress without jeopardizing the structural support of the structure. Such space shall not be used for human habitation. All breakaway walls on the ocean side of a building shall be hinged or otherwise secured at the top in a manner which allows for the free passage of water under the structure.
- 4. The use of fill for structural support of buildings within V Zones is prohibited.
- 5. Man-made alteration of coastal dunes within V Zones is prohibited where such alteration could result in increased flood damage.

Section Floodways - All encroachments, including fill, new construction, substantial improvements to existing structures, and other development is prohibited in the floodway as designated on the Marshfield FIRM maps. Along watercourses that have not had a regulatory floodway designated, the best available Federal, State, local, or other floodway data shall be used to determine the extent of the floodway.

Section <u>Administration</u> - The Building Inspector shall administer this Bylaw as follows: 15.08

- 1. Review proposed construction and alteration of topography within the Floodplain District to assure that all necessary permits have been received from those federal, state and local governmental agencies from which approval is required and ensure that the requirements of this Bylaw have been met.
- 2. Maintain records of the elevation of the lowest floor (in relation to NGVD), including basement, of all new or substantially improved structures. In addition, maintain records as to whether or not such structures contain a basement.

- 3. If a structure has been floodproofed, maintain records of the elevation of the lowest floor and the elevation to which the structure was floodproofed, including the required engineering certification.
- 4. Maintain for public inspection all records pertaining to the provisions of this bylaw.
- 5. Provide notice to the following of any alterations or relocation of a watercourse and ensure that such activity does not diminish the flood carrying capacity of such watercourse:
 - Adjacent Communities
 - NFIP State Coordinator
 Massachusetts Department of Conservation and Recreation
 251 Causeway Street, Suite 600-700
 Boston, MA 02114-2104
 - NFIP Program Specialist
 Federal Emergency Management Agency, Region I
 99 High Street, 6th Floor
 Boston, MA 02110

Section Special Permits 15.09

- 1. The Zoning Board of Appeals may grant a special permit modifying the performance standards in 15.05 and 15.06 for the following:
 - a. Non-residential structures such as boathouses, boatyards, structures designed for education and research, the nature of which require their location within the Floodplain District; and
 - b. Restoration and reconstruction of structures listed in the National or State Register of Historic Places.
- 2. Special Permits shall only be issued upon a determination by the Zoning Board of Appeals that:
 - a. failure to grant the Special Permit would result in exceptional hardship to the applicant;
 - b. the granting of a Special Permit will not result in increased flood heights, additional threats to public safety, extraordinary public expense, or conflict with existing bylaws; and

- c. the relief granted is the minimum necessary considering the flood hazard.
- d. all subdivision proposals are designed to assure that such proposals minimize flood damage; all public utilities and facilities are located and constructed to minimize or eliminate flood damage; and adequate drainage is provided to reduce exposure to flood hazards.
- 3. Any applicant to whom a Special Permit is granted shall be given written notice that the proposed development may result in increased risk to life and property and increased flood insurance premium rates.
- 4. The Zoning Board of Appeals, as the Special Permit Granting Authority (SPGA), may adopt rules and regulations relative to the issuance of such Special Permits and file a copy with the Town Clerk. The Board shall follow the procedural requirements for Special Permits as set forth in Chapter 40A, Section 9.

(Section XV Floodplain Zoning Amended April 2006 ATM) (Section XV Floodplain Zoning Amended April 2012 ATM)